

Research Article

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On the occurrence of *Scythris aristidella* Rebel in Turkey (Lepidoptera, Scythridae)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: On the occurrence of *Scythris aristidella* Rebel in Turkey (Lepidoptera, Scythridae).
Cesa News 106: 1-4, 6 figs.

In this paper, occurrence of *Scythris aristidella* Rebel in Turkey is discussed. The species is known in Central and East Anatolia of Turkey. In Ankara, Karaman and Erzincan provinces, it is reported here for the first time. Both sexes and also male and female genitalia are illustrated for the first time.

Key words: *Scythris aristidella*, *Scythridae*, *Lepidoptera*, fauna, genitalia, Turkey.

Scythris aristidella was described by Rebel (1902) from Akşehir (Konya Province), as “*Butalis aristidella*”. The species was hitherto known from its type-locality in Turkey (Koçak & Kemal, 2009).

The second author collected this species by day from SE of Ayrancı city (Karaman Province), in 1980. Separately, both sexes of this species were observed by him in copula on *Echinops* flower (Asteraceae) in Ankara Prov. (Çal Dağı). Finally, it was observed during feeding on flower of *Lythrum salicaria* near Kemaliye city (Erzincan Province). All collecting and observations were realized by day. According to this information, *Scythris aristidella* appears to be restricted to Central and western part of East Anatolia of Turkey. Thus, it has been recorded from the following provinces, Konya, Ankara, Karaman, and Erzincan. In the last three provinces, the species is reported here for the first time. The adults of the species are seen in late June and July, diurnal in one generation.

In the present paper, the observations, and the material studied are mentioned (Figs. 1-4). Besides, the male (Fig. 5), and the female genitalia (Fig. 6) are illustrated here for the first time.

Material studied: 1♀. Turkey, Konya Prov., Ayrancı 1300m 3 7 1980, A. Koçak leg., 1♂ 1♀. Ankara Prov., Çal Dağı 1050m 12 7 1982, A. Koçak leg. 1 ex. Erzincan Prov., Kemaliye 910m, 29 6 2008, M. Kemal & A. Koçak (coll. Cesa).



Figs. 1-2 – *Scythris aristidella* (Scythridae). Male (above), female (below). Turkey, Ankara Prov. Çal Dağı, photo M. Kemal (Cesa)

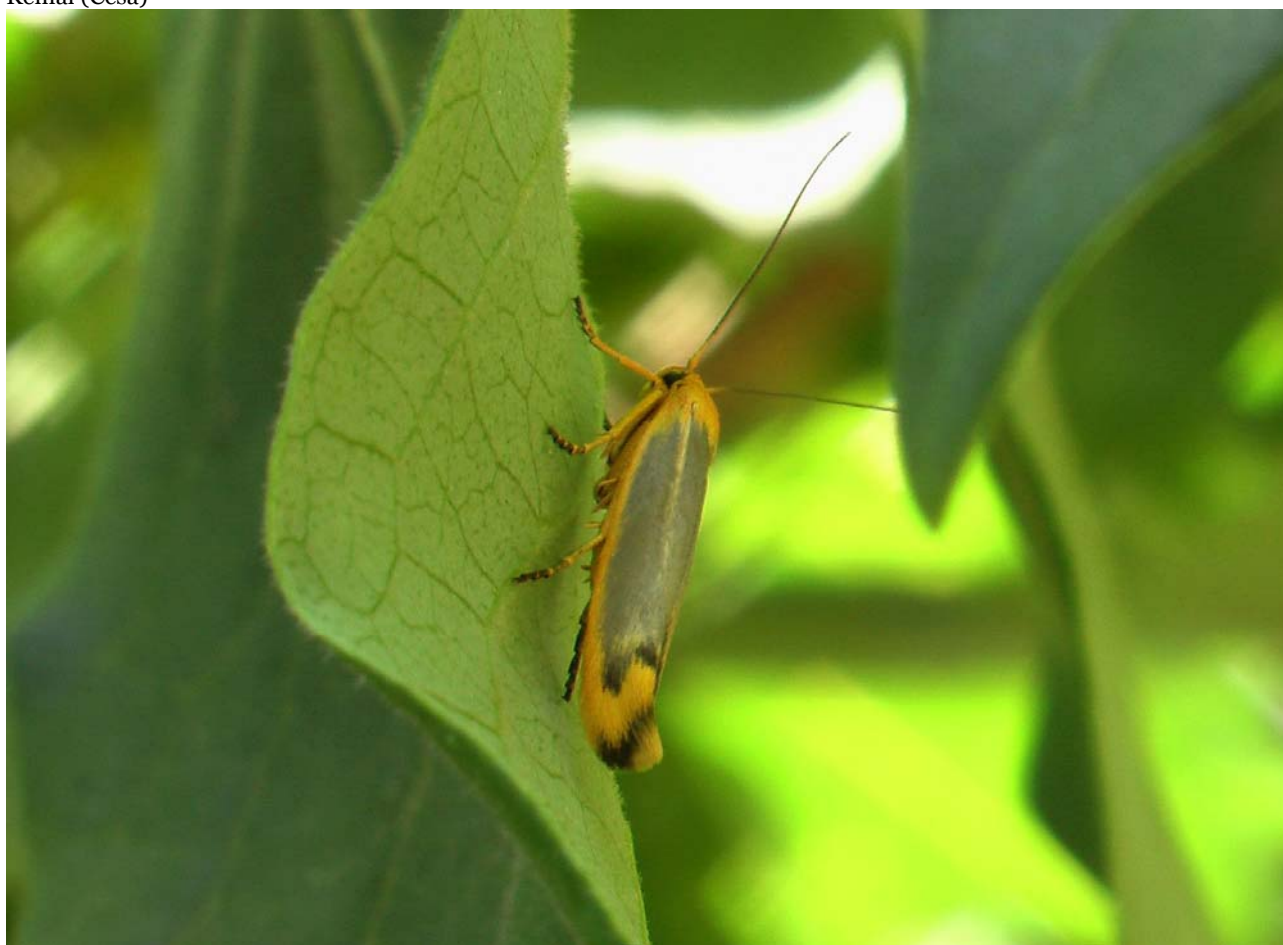


Fig. 3 – *Scythris aristidella* (Scythridae) at rest. Turkey, Erzincan Prov., Kemaliye 910m, 29 6 2008 M Kemal (Cesa)



Fig. 4 – *Scythris aristidella* (Scythridae), during feeding on flowers of *Lythrum salicaria* (Lythraceae). Turkey, Erzincan Prov., Kemaliye 910m, 29 6 2008 M Kemal (Cesa)



Fig. 5 - *Scythris aristidella*. Male genitalia (left); tergite and sternite of last abdominal segment (middle); first abdominal segment connected to thorax (right). GP2135, TR- Ankara, Çal Mt., M. Kemal (Cesa).



Fig. 6 - *Scythris aristidella*. Female genitalia (left); first abdominal segment connected to thorax (right). GP2134, TR-Ankara, Çal Mt., M. Kemal (Cesa).

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Research Article

<http://zoobank.org/urn:lsid:zoobank.org:pub:6E331711-200F-479D-8FEA-102061DED819>

Syringopais temperatella (Led.) in South Turkey (Lepidoptera, Gelechioidea)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: *Syringopais temperatella* (Led.) in South Turkey (Lepidoptera, Gelechioidea). *Cesa News* 106: 5-12, 10 figs. 1 map.

This paper deals with the occurrence of *Syringopais temperatella* (Led.) in South Turkey. Taxonomical history, agricultural importance, morphological descriptions, supra generic classification are discussed. New faunistical notes and pictorial observations in nature are given. Male genitalia of the species is also illustrated. A distributional map for the species is also added.

Key words: *Syringopais temperatella*, Autostichidae, Deoclonidae, Gelechioidea, Lepidoptera, fauna, pest, morphology, male genitalia, ecology, behaviour, Diyarbakır, Hazro, Turkey.

Lederer (1855) described two males collected by Franz Zach from Beirut (Lebanon) as “*Oecophora temperatella*”. The current nomenclatural status of this name is available and valid under the rules of the ICZN. Several junior names proposed for this species are considered as invalid synonyms of *temperatella* Lederer, 1855. The genus name *Syringopais* was established by M.Hering in 1919. However, the higher classification of this genus is still unstable. It was placed in “*Tineina*” (Lederer, 1855; Stainton, 1867), *Elachistidae* (Staudinger & Rebel, 1901; Amsel, 1933; Pirhadi et al., 2008), *Oecophoridae* (Meyrick, 1920; Wilkinson, 1927), *Scythridae* (Wiltshire, 1957), *Deoclonidae* (Hodges, 1998), *Gelechiidae* (Osthelder, 1935)¹, and also *Autostichidae*.²

Agriculturally, this species was first reported by Sureya Bey in Turkey from Denizli and Mardin, as a pest of cereal. This material was identified by Prof. Karsch as “*Scythris temperatella* Ld.” (Hering, 1919). In Cyprus, the species was also given as a serious pest (Wilkinson, 1927). Wiltshire (1957) mentioned this species from Iraq (from plain and the mountains) as a pest on wheat and barley. In Lorestan (Iran), this species was recorded as a cereal pest (Pirhadi et al., 2008). First parasitoids of the species were identified in SE Turkey as *Bracon* (*Habrobracon*) *stabilis* Wesm., and *Apanteles* sp. (*Braconidae*, *Hymenoptera*) (Gözüaçık et al., 2008). Talebi et al. (2011) reported first eulophid wasps as parasitoids of *S. temperatella* Ld. from Lorestan (Iran). These are: *Diglyphus chabrias* (Walker, 1838), *Necremnus tidius* (Walker, 1839), and *Sympiesis euspilapterygis* (Erdos, 1958).

The specimens were recently observed and photographed by the first author in remote area of Hazro district (Diyarbakır Province, SE Turkey) (**Fig.1**). Brief taxonomical information and pictorial observations of the species are given below:

¹ The genus is classified in the global Lepidoptera names index of the Natural History, London as “*Gelechiidae*” [last Access 23 May, 2015].

² The genus is placed in the family *Autostichidae* (Lepiforum: <http://www.lepiforum.de/>), in the subfamily *Deocloninae* of the family *Autostichidae* (Fauna Europaea: http://www.faunaeur.org/full_results.php?id=434258) [last Access 23 May, 2015].

Autostichidae / Deoclonidae / Syringopaidinae*³**Syringopais* M. Hering, 1919**

Dt. Ent. Z., Iris 32: 129. Type-species: [*Oecophora*] *temperatella* Lederer, 1855 (the genus mentioned as *Scythris*), by original designation and monotypy.

Nochelodes Meyrick, 1920, Exotic Microlepid. 2: 367. Type-species: *Nochelodes xenicopa* Meyrick, 1920, by monotypy.

***Syringopais temperatella* (Lederer, 1855) (Figs. 1-10, Map 1)**

Synonyms: *temperatella* Lederer, 1855; *fuscifasciata* Stainton, 1867; *ochrolitella* Staudinger, 1871; *xenicopa* Meyrick, 1920.

Original reference: *Oecophora temperatella* Lederer, 1855, Verh. zool.-bot. Ver. Wien 5: 230, Taf. 5 fig. 8. Syntypes 2♂: [Lebanon]: Beirut (leg. Zach).

Range (in code): GR CY TR LB Bei IL Pa Hf IQ Shq Dia IR Lo 15 20 21 32 35 42 46 47 21L 21Ld 21Lf 42B 46G (Map 1)

Flight and habitat: It has a very weak flight among the lower grasses, with diurnal and nocturnal preference. Normally, it inhabits at the grassy places of degraded *Quercus* woodland (**Fig. 2**), and rocky slopes with a remnant of mountain steppe, mixed tragacanthic and malacophyllous plant formation (**Fig. 3**). We treat this species as mainly West Asiatic faunal element of the natural places of Hazro, described above. Wheat-, and barley fields should be a secondarily adopted habitat type for this species, at which is considered by human being as a pest, due to an economic assessment.

Adult phenology and behaviour: The moths fly in May, in one generation. In Hazro, some of the males were observed during feeding on the nectar of *Trifolium* (*Fabaceae*), and also on other flowers of herbaceous plants, by day (**Figs. 4-8**). It has a sympatric flight with *Pleurota* ssp. (*Oecophoridae*), but easily distinguishable especially by naked and curved palpus labialis.

Larva mines leaves of *Hordeum*, *Triticum*, etc. (*Poaceae*). Pest records are given from Turkey (Hering, 1919; Gözüağık et al., 2008), Cyprus (Wilkinson, 1927), Iraq (Wiltshire, 1957), Iran (Pirhadi et al., 2008).

Descriptions of the adults: First detailed description was made by Lederer (1855) on two males collected from Beirut. Stainton (1867) described the first female of the species from Palestine as "*Oecophora fuscifasciata*". Staudinger (1871) described and illustrated very well the female of this species collected by Krüper from "Smyrna" [=İzmir] in April, as "*Butalis ochrolitella*". Meyrick (1920) gave a detailed description of the genus and the species based upon a male collected by Barraud from "Palestine, Nazareth" as "*Nochelodes xenicopa*".

Present descriptional notes:

This species has a strong sexual dimorphism. In size, male larger than female, wing markings remarkably different in both sexes (**Figs. 8, 9**).

Males: Forewing: 6.5-7.5 mm, wingspan: 14-15 mm. Head small, eye blackish when alive. Proboscis well developed. Palpus labialis almost as in *Gelechiidae*, ochreous, curved upwards, and naked. Antenna long, serrulate, its basal part ochreous. Wings elongate, forewing fulvous-ochreous, blackish scales appear at basal part to some degree. Hindwing lanceolate, dark grey. Thorax fulvous-ochreous above, its ventral part and legs mostly grayish in appearance. Hind tibia with long grayish scales and hairs (**Figs. 4-7, 9**).

Females: Forewing: 5-5.5 mm, wingspan: 11-11.5 mm. Palpus labialis curved upwards, naked, ochreous. Proboscis well developed. Antenna long as in male. Wings elongate, forewing fulvous-ochreous, blackish scales appear very heavily at basal part, also postdiscal broad, black transversal band distinguishes female from male. Hindwing dark grayish, its apex fulvous. Ciliae dark gray, long. Thorax and abdomen dark gray-blackish, abdominal tip fulvous (**Fig. 8**).

Male genitalia and the abdominal skin are illustrated (**Fig. 10**). Absence of gnathos is evaluated as a common diagnostic character of *Deoclonidae* and *Syringopaidinae* (Hodges, 1998).

³ *Deoclonidae* also used validly by some authors at family or subfamily level. This genus was established by Hodges (1998), with the type-genus *Deoclona* Busck, 1903 for Nearctic and Neotropical groups. In this family, Hodges described also a subfamily, *Syringopaidinae*, based upon the genus *Syringopais* Hering. The diagnostic characters of the adult of *Syringopaidinae* are as follows; gnathos absent, vinculum weakly sclerotized mesially in male genitalia, and hindwing M1/M2 stalked, cell open on hindwing. The phylogenetical relationship of *Autostichidae* and *Deoclonidae* is still under discussion. Therefore, it is not an easy to decide the belongingness of this genus.

Material studied: 8 ♂, 2 ♀ Diyarbakır Prov., Hazro, Dadaş S. 990m (21Lf), 16 5 2015; 3 ♂, Hazro, Uzunangit 935m (21Lc) light trap, 16 5 2015, M Kemal & A Koçak leg. (coll. Cesa).
New record for Hazro district!
For the codes of the collecting sites, vide <http://www.members.tripod.com/entcesa/Code.pdf>

Acknowledgement:

We sincerely thank to Dr. Peter Huemer (Austria) for the identification of the species.

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Fig. 1 – Hazro mountains (Diyarbakır, SE Turkey), 16 5 2015, M. Kemal (Cesa)



Fig. 2 – Habitat of *Syringopais temperatella*. Turkey, Diyarbakır Hazro, Dadaş S. 990m 16 5 2015, M. Kemal (Cesa).



Fig. 3 – Habitat of *Syringopais temperatella* for night collecting. Turkey, Diyarbakır Hazro, Uzunangıt 935m 16 5 2015, M. Kemal (Cesa).



Fig. 4 – *Syringopais temperatella* male, during feeding on flower of *Trifolium* (Fabaceae). Dadaş S. 990m 16 5 2015, M. Kemal (Cesa)

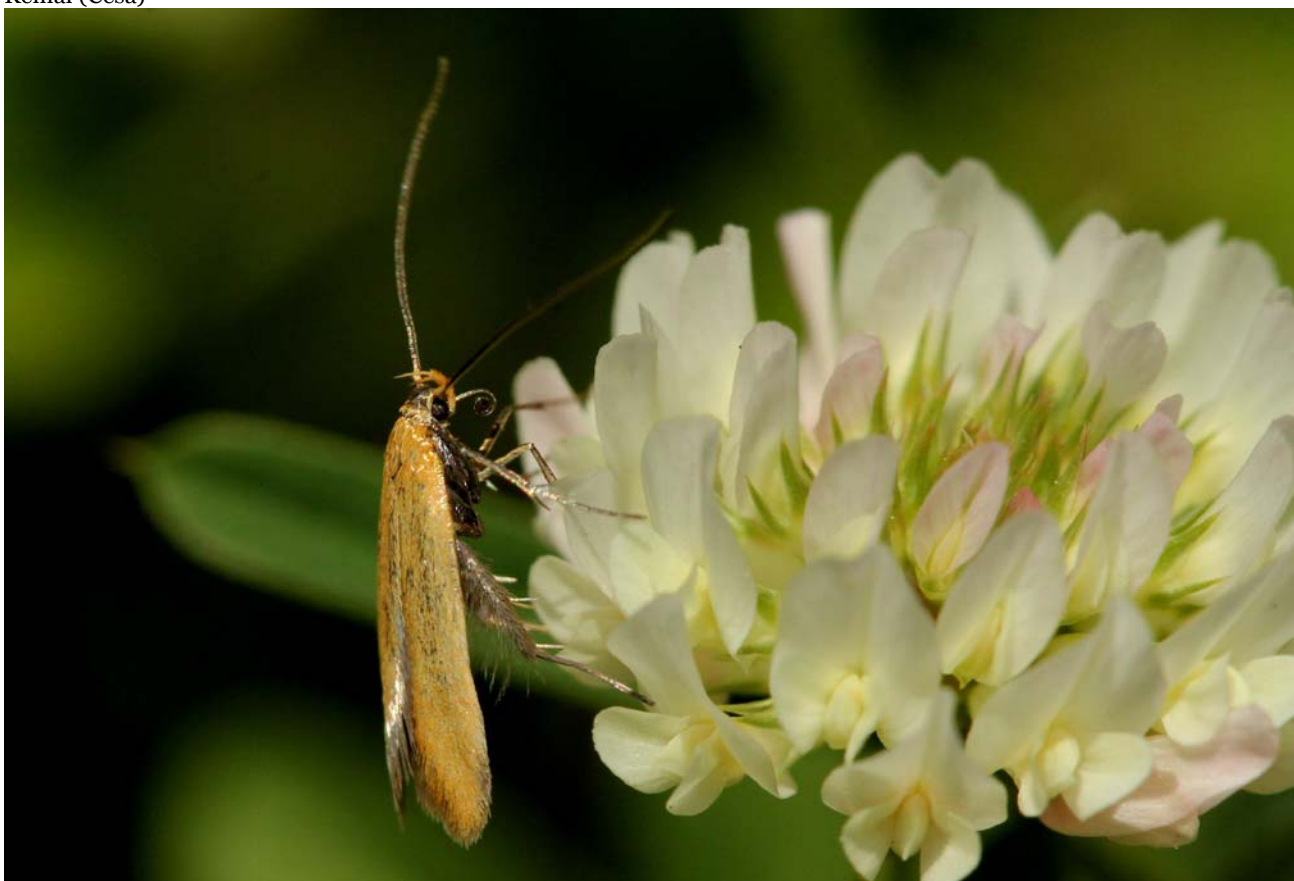


Fig. 5 – *Syringopais temperatella* male, during feeding on flower of *Trifolium* (Fabaceae). Dadaş S. 990m 16 5 2015, M. Kemal (Cesa)



Fig. 6 – *Syringopais temperatella* male, at rest. Dadaş S. 990m 16 5 2015, M. Kemal (Cesa)



Fig. 7 – *Syringopais temperatella* male, at rest. Dadaş S. 990m 16 5 2015, M. Kemal (Cesa)



Figs. 8, 9 – *Syringopais temperatella* female (left), male (right). Dadaş S. 990m 16 5 2015, M. Kemal (Cesa)

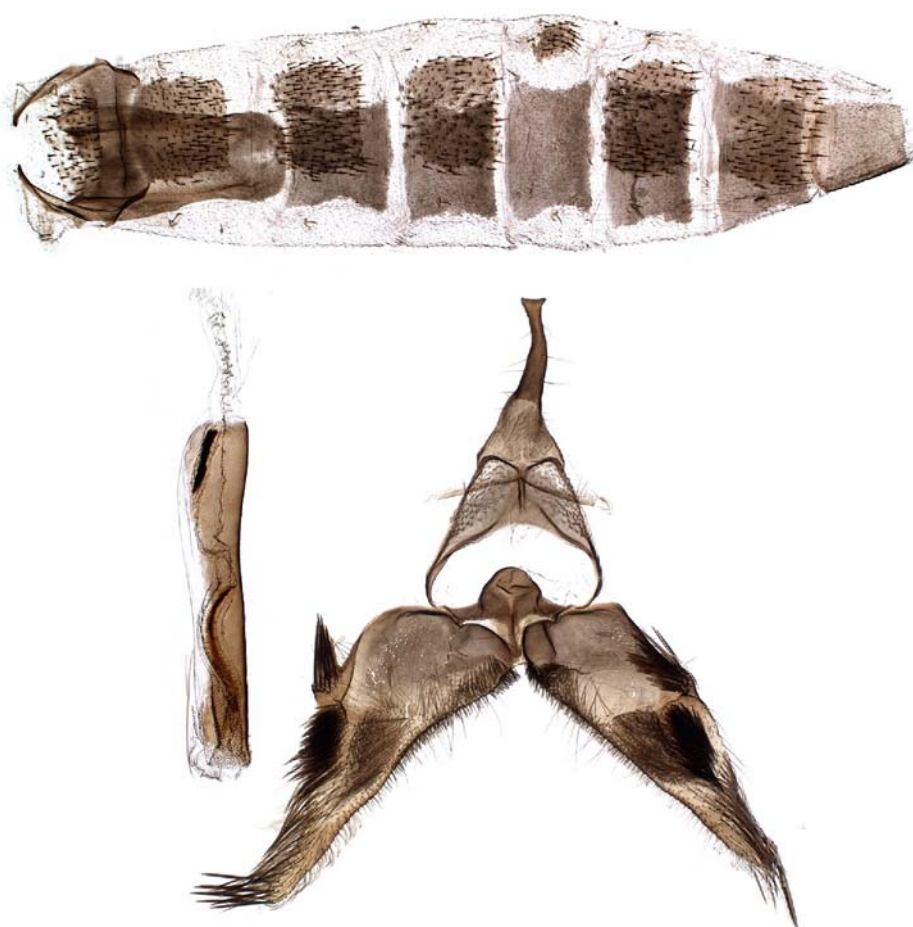
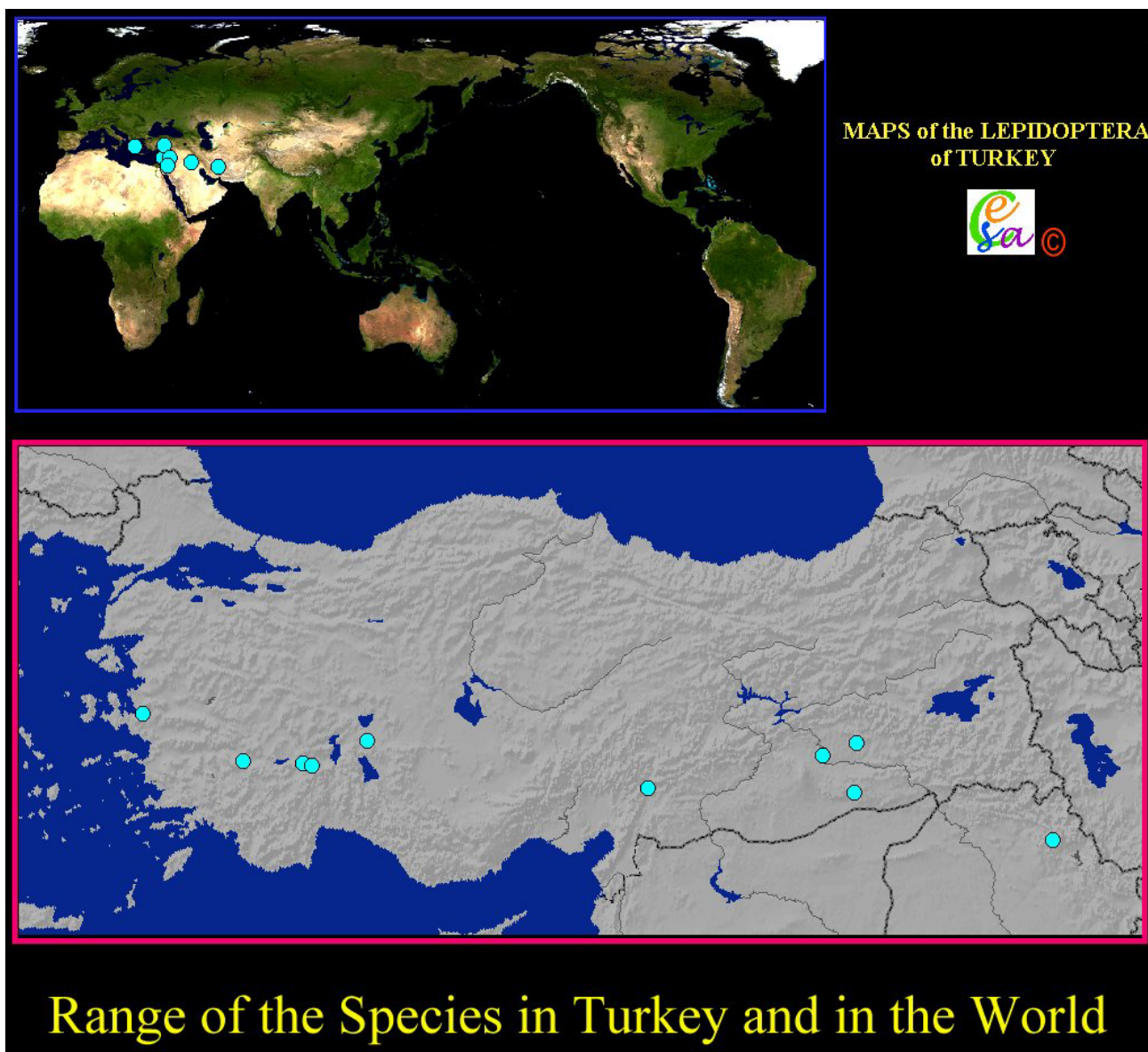


Fig. 10 – *Syringopais temperatella* male genitalia, and abdominal skin (GP2161, M. Kemal). Dadaş S. 990m 16 5 2015, photo M. Kemal (Cesa)



Map 1 - *Syringopais temperatella*, range of the species in South Turkey and adjacent countries, A Koçak (Cesa)

Research Article

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Parnopes grandior (Pallas) in East Turkey (Hymenoptera, Chrysididae)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: *Parnopes grandior* (Pallas) in East Turkey (Hymenoptera, Chrysididae). *Cesa News* 106: 13-15, 3 figs.

This paper deals with the occurrence of *Parnopes grandior* (Pallas) in East Turkey. In 2013, the authors recorded this species from two localities in Bitlis Province of East Turkey. This provincial record is newly reported here. Besides, pictorial observations during feeding of the species are also given.

Key words: *Parnopes grandior*, Hymenoptera, Chrysididae, fauna, Bitlis Province, Turkey.

This species was described by Pallas in 1771 from Russia. It was hitherto reported in Turkey from Artvin, Erzurum (Yıldırım & Strumia, 2006; Strumia & Yıldırım, 2007), also Kırklareli, Ayvalık (Balıkesir), Konya and Şanlıurfa (Wisniowski & Strumia, 2007). Present records are from Nemrut Caldera 2350m and Aygır, near Süphan Mt. 1960m in the Bitlis Province, during feeding on *Scabiosa* flowers (Dipsacaceae) in July (new record).

Material studied: 5 specimens from East Turkey: Bitlis Province, Tatvan, Nemrut Mt. Caldera Ilıkgöl 2350m, 4 8 2013, M. Kemal & A. Koçak; 1 specimen from the same province, Adilcevaz, Aygır gölü 1960m 5 8 2013, M. Kemal & A. Koçak (coll. Cesa).



Fig. 1 – *Parnopes grandior* during feeding on the flower of *Scabiosa* (Dipsacaceae). East Turkey, Bitlis Prov., Nemrut Mt. Caldera, 2350m 4 8 2013, M. Kemal (Cesa)



Fig. 2 – *Parnopes grandior* during feeding on the flower of *Scabiosa* (Dipsacaceae). East Turkey, Bitlis Prov., Adilcevaz, Aygırgölü 1960m, 5 8 2013, M.Kemal (Cesa)



Fig. 3 – *Parnopes grandior*, same specimen from the same place, M.Kemal (Cesa)

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